Title: ELECTRICAL POWER GENERATOR

Page 2 Dkt: H0004291.65262

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the Application. Please amend the claims as follows.

- 1. (Currently Amended) An electrical power generator comprising:
 - a) a water vapor generator;
- b) a hydrogen gas generator attached to the water vapor generator, said hydrogen generator containing a substantially non-fluid substance which reacts with water vapor to generate hydrogen gas; said hydrogen generator being coupled to said water vapor generator;
- c) a fuel cell attached to the hydrogen gas generator; said fuel cell being coupled to said hydrogen gas generator; and
- d) a <u>porous plug or at least one</u> valve that regulates water vapor flow to the hydrogen gas generator, <u>and</u>
- e) a tensile membrane within the water vapor generator which exerts pressure directing water vapor from the water vapor generator to the hydrogen gas generator.
- 2. (Original) The power generator of claim 1 further comprising at least one conduit connecting the water vapor generator to the hydrogen gas generator and at least one conduit connecting the generator to the fuel cell.
- 3. (Original) The power generator of claim 1 further comprising a return line which directs residual water vapor and hydrogen gas from the fuel cell to the water vapor generator.
- 4. (Original) The power generator of claim 1 wherein the water vapor generator comprises a chamber at least partially filled with water.
- 5. (Original) The power generator of claim 1 wherein the water vapor generator comprises a chamber at least partially filled with a mixture of water and alcohol.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116

Serial Number: 10/780,827

Filing Date: February 18, 2004 Title: ELECTRICAL POWER GENERATOR Page 3 Dkt: H0004291.65262

6. (Original) The power generator of claim 1 wherein the water vapor generator comprises

a chamber at least partially filled with water vapor.

7. (Original) The power generator of claim 1 wherein the water vapor generator is at least

partially filled with ice.

8. (Original) The power generator of claim 1 wherein the hydrogen gas generator

comprises a chamber at least partially filled with a substantially non-fluid substance which reacts

with water vapor to generate hydrogen gas.

9. (Original) The power generator of claim 1 wherein the hydrogen gas generator

comprises a chamber at least partially filled with a substantially non-fluid substance which reacts

with a mixture of alcohol and water vapor to generate hydrogen gas.

10. (Original) The power generator of claim 1 further comprising hydrogen gas initially

loaded within at least one of said water vapor generator, hydrogen gas generator, fuel cell and

said optional conduits.

11. (Original) The power generator of claim 1 further comprising at least one device

attached to at least one of said water vapor generator, said hydrogen generator or said fuel cell

for causing an initial flow of water vapor from the water vapor generator to the hydrogen gas

generator.

12. (Original) The power generator of claim 1 wherein said substantially non-fluid substance

comprises a material selected from the group consisting of alkali metals, calcium hydride,

lithium hydride, lithium aluminum hydride, B₁₀H₁₄, sodium borohydride, lithium borohydride

and combinations thereof.

Title: ELECTRICAL POWER GENERATOR

Page 4 Dkt: H0004291.65262

13. (Original) The power generator of claim 1 wherein said substantially non-fluid substance

comprises sodium borohydride.

14. (Original) The power generator of claim 1 wherein said substantially non-fluid substance

comprises lithium borohydride.

15. (Original) The power generator of claim 1 wherein said substantially non-fluid substance

comprises lithium aluminum hydride.

16. (Original) The power generator of claim 1 further comprising a hydrogen generation

catalyst combined with said substantially non-fluid substance.

17. (Original) The power generator of claim 16 wherein said catalyst is selected from the

group consisting of cobalt, nickel, ruthenium and alloys and combinations thereof.

18. (Original) The power generator of claim 1 further comprising at least one pump for

pumping hydrogen gas and water vapor between the water vapor generator and the fuel cell.

19. (Original) The power generator of claim 18 wherein the at least one pump comprises a

mesopump.

20. (Cancelled).

21. (Currently Amended) The power generator of claim 120 wherein the at least one valve

comprises a mesovalve.

22. (Currently Amended) The power generator of claim 120 wherein the at least one valve is

controlled by gas pressure within the power generator.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116

Serial Number: 10/780,827

Filing Date: February 18, 2004

Title: ELECTRICAL POWER GENERATOR

Dkt: H0004291.65262

Page 5

23. (Currently Amended) The power generator of claim 120 wherein the at least one valve

regulates gas pressure within the power generator.

24. (Currently Amended) The power generator of claim 1 wherein said further comprising

porous plugs are adjacent to said water vapor generator, said plugs substantially impeding the

flow of liquid water from said water vapor generator and substantially allowing the flow of

hydrogen gas and water vapor into and out of said water vapor generator.

25. (Original) The power generator of claim 1 wherein said substantially non-fluid substance

is in powder, granule or pellet form.

26. (Original) The power generator of claim 1 wherein said fuel cell is at least partially

surrounded by a thermal insulator.

27. (Original) The power generator of claim 1 further comprising a heater adjacent to the

fuel cell.

(Cancelled). 28.

29. (Original) The power generator of claim 1 wherein the water vapor generator, the

hydrogen gas generator, said fuel cell and said optional conduits are formed within a polymeric

block.

30. (Original) The power generator of claim 29 wherein the polymeric block comprises a

polyethylene, a polyimide, a polycarbonate, an acrylic, or combinations thereof.

31-54 (Cancelled).